

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Cancelled)
2. (Previously presented) The semiconductor device according to claim 51, wherein the substrate is silicon carbide.
3. (Previously presented) The semiconductor device according to claim 51, wherein said III-V Nitride semiconductor epitaxial film is formed in contact with a substrate having (11-20) face.
4. (Cancelled)
5. (Previously presented) The semiconductor device according to claim 51, wherein a number of group III atoms are equal to a number of nitrogen atoms on a surface of said III-V Nitride semiconductor epitaxial film.
- 6-50. (Cancelled)
51. (Currently amended) A semiconductor device comprising
a first III-V Nitride semiconductor epitaxial film having 4H-polytype structure selectively
formed in contact with a substrate having 4H-type structure, wherein said first III-V Nitride
semiconductor epitaxial film is a 4H-AlN film,
a seed layer of III-V Nitride having 4H-polytype structure selectively formed on said first
III-V Nitride semiconductor epitaxial film, wherein said seed layer contains Ga, and

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a second III-V Nitride semiconductor epitaxial film having 4H-polytype structure formed on said first III-V Nitride semiconductor epitaxial film, wherein said second III-V Nitride semiconductor epitaxial film contains Ga and is in contact with said seed layer.

52. (Currently amended) An optoelectronic device comprising,

a first III-V Nitride semiconductor epitaxial film having 4H-polytype structure selectively formed in contact with a substrate having 4-H type structure;

a seed layer of III-V Nitride having 4H-polytype structure selectively formed on said first III-V Nitride semiconductor epitaxial film,

a second III-V Nitride semiconductor epitaxial film having 4H-polytype structure formed on said first III-V Nitride semiconductor epitaxial film; and

a waveguide formed on said second III-V Nitride semiconductor epitaxial film,

wherein said first III-V Nitride semiconductor film is a 4H-AlN film,

said seed layer contains Ga,

said second III-V Nitride semiconductor epitaxial film contains Ga and is in contact with said seed layer, and

said second III-V Nitride semiconductor epitaxial film includes an n-type layer, a p-type layer and an active layer, said active layer being formed between said n-type layer and said p-type layer.

53. (Previously presented) The optoelectronic device according to claim 52, wherein a plurality of layers are disposed between said waveguide and said substrate.

54. (Previously presented) The optoelectronic device according to claim 52, wherein said substrate having 4-H type structure is SiC.

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55. (Previously presented) The optoelectronic device according to claim 52, wherein said first III-V Nitride semiconductor epitaxial film is formed on a substrate having (11-20) face.

56. (Previously presented) The optoelectronic device according to claim 52, wherein a number of group III atoms are equal to a number of nitrogen atoms on a surface of said second III-V Nitride semiconductor epitaxial film.

57. (Previously presented) The optoelectronic device according to claim 52, wherein said waveguide is formed as a straight line perpendicular to either (0001) face or (1-100) face.

58. (New) The semiconductor device according to claim 51, wherein said second III-V Nitride semiconductor epitaxial film is formed by epitaxial lateral overgrowth.

59. (New) The semiconductor device according to claim 52, wherein said second III-V Nitride semiconductor epitaxial film is formed by epitaxial lateral overgrowth.